
Prevalence and Contributing Factors Of Pregnancy Induced Hypertension among Women Admitted in MGMCRI from Jan-Dec 2016

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Abstract:

Pregnancy induced hypertension is considered high risk when the potential complications that could affect the mother or fetus or both. Pregnancy induced hypertension is estimated to affect 7% to 10% of all pregnancies. This is a major cause of maternal and perinatal mortality and morbidity.¹The objectives of the study was, to assess the prevalence of Pregnancy Induced Hypertension ,to find out the contributing factors of pregnancy induced hypertension. A retrospective descriptive research design was adopted for the study. All case sheets of pregnancy induced hypertension from Jan-Dec 2016 were selected from Medical Record Department by convenient sampling technique. The required information was collected from the records. The data were analyzed by using descriptive statistics. The result revealed that the prevalence was found to be 35(2.51%) out 1392 women admitted in obstetrical unit. Out of the 35 women, 32(92%) had gestational hypertension and 3(8%) had chronic hypertension.

Key words :Perinatal morbidity, gestational hypertension

INTRODUCTION

Pregnancy is one of the most memorable moments in the life of women. There may be many changes occurring within the body in order to bear a creation. All through nine months of hard ships in bearing a child in womb, mother only feel pleasure in having a life within her.

Nowadays it is more common to find many antenatal mother coming under the category called "Pregnancy induced hypertension", one may be annoyed hearing this word pregnancy induced hypertension.¹There may be many factors that contribute as an etiological factor for pregnancy induced hypertension in women. They are history of hypertension, Family history of pregnancy induced hypertension, age above 30, Diabetes mellitus, kidney

disease, multiple pregnancy, multiple fetuses, hyperplacental, placental ischemia and polyhydromnios.^{1,2}

Pregnancy induced hypertension is the persistent deviation of systolic blood pressure 140mmhg or above the diastolic pressure of 90 mmHg or above. Population based data indicates that approximately 1% of pregnancies are complicated by chronic hypertension, 5-6% gestational hypertension (without proteinuria) and 1-2% by preeclampsia³.

Approximately 1% of all pregnancies are complicated by Pregnancy induced hypertension and the prevalence may range from 1-14%. This is a major cause of perinatal mortality and morbidity and of maternal morbidity.^{1,3} This is a major global health problem, is chronic disease and is now growing

as an epidemic in both developed and developing countries³.

Need for the Study

Hypertensive disorders in pregnancy are among the leading cause of maternal mortality, along with thromboembolism, hemorrhage and non-obstetric injury. Hypertension before pregnancy or during early pregnancy is associated with two fold increased risk of gestational diabetes mellitus^{6,7}.

A retrospective survey was performed on 2300 pregnant women who had referred to shahidmotahharihospital of Jahrom School of Medical Science. Diagnosis of hypertensive disorders of pregnancy and their probable complications were made according to medical recording files. Among a studied patients, 3.3% were diagnosed as having hypertensive disorders of pregnancy of which 96% were cases of pre-eclampsia/eclampsia or transient hypertension. In hypertensive patient, the overall maternal mortality rate was 1.3 per 10,000 and prenatal mortality rate was 53 per 1000 births. Low birth weight neonates were observed in 20% of cases. It was concluded that hypertensive disorder of pregnancy have great influence on maternal and neonatal morbidity and mortality rate.⁴

World Health Organization stated that hypertensive disorders in pregnancy are a universally common disease. How Pregnancy induces and aggravates hypertension is still not understood fully. The incidence of Pregnancy Induced Hypertension (PIH) in India ranges from 5-15%.⁵In primi mothers 16% and multi mothers 7%. It causes IUGR leading to low birth weights. It increases maternal mortality by 10-15% and the pre-natal mortality and morbidity by 15-25%.³After reviewing many studies regarding pregnancy induced hypertension, we selected this study with an aim to find the

rate of pregnancy induced hypertension and possible risk factor of pregnancy induced hypertension.

Objectives

- To assess the prevalence of Pregnancy Induced Hypertension
- To find out the contributing factors of Pregnancy Induced Hypertension

Methodology

A retrospective study approach and Descriptive research design was adopted for the study. Convenient sampling technique was used to select the sample based on the inclusion criteria. Before starting the data collection researchers obtained permission from the Medical Superintendent, MRD officer and HOD Dept of OBG to conduct the study. Data was collected from the patient case sheets based on the demographic and clinical variables and the contributing factors that were listed out in the study.

Results

- The demographic variables findings denotes, with regard to Age the maximum 12(34%) were in group of 26-30 years. With regard to work 35(100%) were doing moderate type of work. Out of 35 women, 10(29%) had previous history of child birth. In gestational age at delivery the maximum 18(51%) were in 34-36 weeks. In classification of pregnancy induced hypertension in present pregnancy 32(92%) were diagnosed with gestational hypertension. Out of 35 women 15(43%) had past history of pregnancy induced hypertension. In pregnancy induced hypertension diagnosed in weeks 20(57%) were diagnosed at 34-36 weeks of gestation. Out of 35 women 19(54%) had any other associated high risks with pregnancy induced hypertension. In presence of any imminent symptoms all 35(100%) were not having any imminent symptoms.

The clinical variables of pregnancy induced hypertension with regard to height maximum of 10(29%) were <150cm. In weight out of 35 samples 27(77%) were >70kg. With regard to BMI the maximum 21(60%) were grade III BMI. Out of 35 samples 17(49%) were under the category of hypertension. In pulse rate 35(100%) were 70-80 beats per min. In mean arterial pressure the maximum 12(34%) samples had high normal arterial pressure. With regard to pulse pressure out of 35 samples 20(57%) had high normal pulse pressure. In urine albumin 35(100%) were grade 3. With regard to anemia the highest 18(51%) were under moderate anemic group.

Table 1 .Prevalence rate of women with pregnancy induced hypertension from Jan-Dec 2016

N=35			
<u>S.No.</u>	<i>Total number of women admitted in MGMCRI from Jan-Dec 2016</i>	<i>Total number of women with pregnancy induced hypertension from Jan - Dec 2016</i>	<i>Prevalence Rate %</i>
a.	1392	35	2.51

Table 1 described the prevalence of pregnancy induced hypertension among women admitted in obstetrics unit in MGMCRI from Jan-Dec 2016 .Total number of women with Pregnancy induced hypertension were 35 out of 1392 women admitted in obstetrical unit in MGMCRI. Hence the total prevalence of Pregnancy induced hypertension of women admitted in MGMCRI from Jan- Dec 2016 was found to be 2.51 %. Out of 35 sample 32(92%) had gestational hypertension and 3(8%) had chronic hypertension.

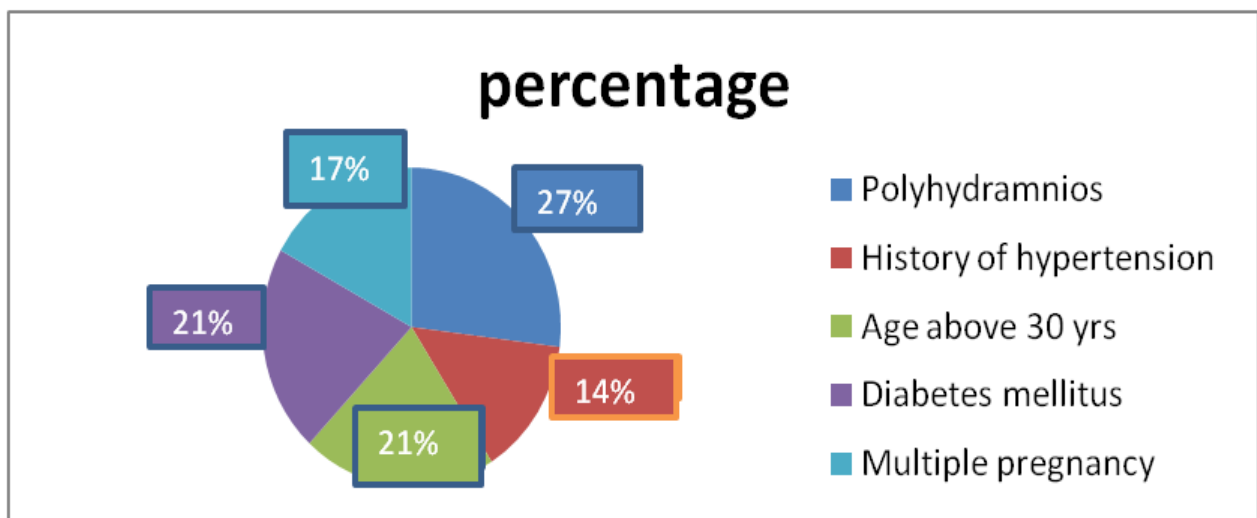


Figure 1- Percentage distribution of contributing factors of women with PIH

Figure 1 depicts the contributing factors of women with Pregnancy induced hypertension , out of 35 samples 7(20%) were with history of hypertension ,10 (28.57%) comes under the age above 30 years, 10(28.57%) had history of diabetes mellitus, 8 (22.85%) were with multiple pregnancy and 13(37.14%) were with polyhydromnios.

DISCUSSION :

Hypertension is most common medical problem encountered during pregnancy, complicating 2-3% of pregnancies . Out of 35 samples 27(77%) had weight >70kg ,21(60%) had grade III BMI, 18(52%) were primigravida , 17(49%) belongs to hypertension category and majority 18(51%) of them had moderate anemia. which revealed that pregnancy induced hypertension is more common among maternal obesity and anemic women .

CONCLUSION

The study concluded that the prevalence of pregnancy induced hypertension was found to be 2.51% out 1392 women. Pregnancy induced hypertension positively related to maternal obesity and anemic women .

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ANSWER KEY FOR MAY-AUGUST 2018

1C/8	U	S	T	A	R	D	A	P	P	11L	E	12G
H										E		O
I				2P	E	A	R			M		S
3K	I	W	I							O		E
O						4B	10A	N	A	N	A	B
9O							P					E
R							R					R
5A	V	O	C	A	D	O	I					R
N							6C	H	E	R	R	Y
7G	R	A	P	E	S		O					
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